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AUTHOR McCrory, David L.
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ABSTRACT

The Center for Teachers in the Technologies was designed to upgrade teacher competence in: (1) instructional strategies, (2) diagnostic skills, (3) background information, and (4) curriculum. Viewing itself as a service organ for teachers, the center responded to needs articulated by the educational community by designing and delivering brief, well-focused units on problem solving in the technologies. The center provides leadership, information, and instructional resources for the community in areas such as teaching the metric system, technological curriculum in the elementary school, aerospace education, etc. The objectives and accomplishments of the center are described in detail, and the appendixes concentrate on the inservice and instructional units that the center has developed. (EMH)

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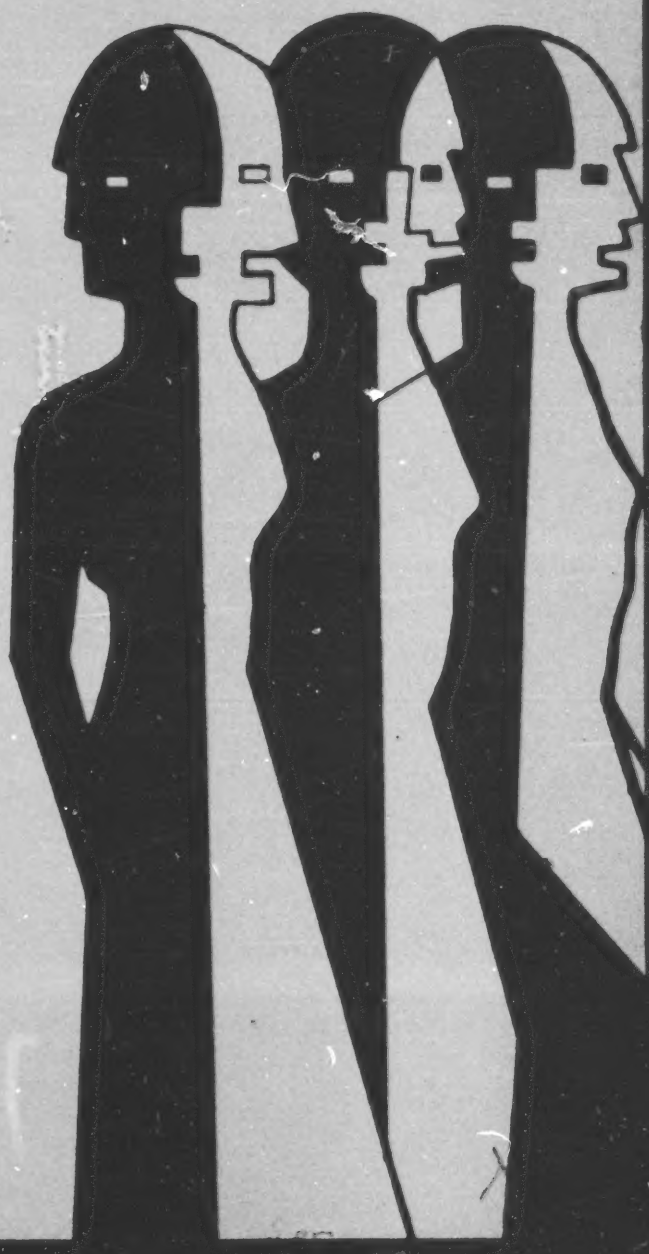

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APPALACHIAN CENTER FOR
TEACHERS IN THE TECHNOLOGIES
AT WEST VIRGINIA UNIVERSITY
MORGANTOWN, WEST VIRGINIA

PROJECT ADMINISTRATION

Dr. Paul W. DeVore, Chairman
Program for the Study of Technology
Morgantown, West Virginia

Dr. James G. Harlow, President
West Virginia University
Morgantown, West Virginia

Dr. David L. McCrory, Project Director
Program for the Study of Technology
Morgantown, West Virginia

Dr. William Monahan, Dean
College of Human Resources and Education
Morgantown, West Virginia

Mr. James F. Snyder, Curriculum Specialist
Bureau of Curriculum and Instruction
State Department of Education
Charleston, West Virginia

Teacher Center Staff
1974-75

Wayne Andrews, Training Associate
Project Open - Mason County
Specialist in Curriculum Development

Stan Bucholc, Training Associate
Training Program for Teachers in the Technologies
Specialist in Instructional Design and Communications

William Cupples, Training Associate
Training Program for Teachers in the Technologies
Specialist in Transportation Technology and Photography

Jim Gray, Training Associate
Project Open - Mason County
Specialist in Curriculum Development

William Griscom, Director
Curriculum Research and Resource Center
Specialist in Information Storage and Retreivel

Cathy Kisner, Secretary
Technology Education Research and Resource Center
West Virginia University

Leslie Miller, Training Associate
Training Program for Teachers in the Technologies
Specialist in Transportation Technology and Publicity

Charles Nestor, Training Associate
Project Open - Mason County
Specialist in Curriculum Development

Jerry Richter, Training Associate
Training Program for Teachers in the Technologies
Specialist in Interdisciplinary Studies

John Ritz, Training Associate
Project Open - Cabell County
Specialist in Curriculum Development

Jerry Robinson, Training Associate
Intergovernmental Personnel - NASA Langley
Specialist in Energy Sources and Aerospace Technology

Walt Seder, Training Associate
Project Open - Mason County
Specialist in Curriculum Development

Julia E. Summers, Training Associate
Training Program for Teachers in the Technologies
Specialist in Home Economics

Frank Trocki, Training Associate
Project Open - Wetzel County
Specialist in Curriculum Development

John Wright, Training Associate
Project Open - Wetzel County
Specialist in Curriculum Development

TABLE OF CONTENTS

I. Project Status..... 1

A. Introduction and Background..... 1

1. Purpose and Function..... 1

2. The Technology Model - Rationale..... 3

3. The Program - Bacis Considerations..... 5

4. Structure and Program..... 6

B. Program Objectives - Primary..... 7

1. Organizational - Operational..... 7

2. Instructional - Educational..... 8

3. Field and Community Service..... 8

4. Education and Technology Resources..... 9

C. Program Objectives - Secondary 9

II. Activities and Accomplishments.....10

A. Operation.....10

B. Metric System.....13

C. Teaching-Learning Units.....13

D. Elementary School Technology.....13

E. Technology Education Research and Resource Center.....14

F. TPTT Contractual Services.....14

G. Project Open Programs.....15

H. Chronology of Activities 1974-75.....16

Appendixes.....18

Preface:

The report which follows describes activities associated with a program concerned with raising the educational level of children and young adults of the Appalachian Region. The program has concentrated on the extremely low level of technological literacy among educators, teachers and consequently the present and future citizens of a technologically exploited region. The program is currently in its fifth year of operation.

The program design is based on the research literature regarding the process and theory of change. The model is a technology model. It is problem-oriented, task-oriented and future-oriented.

Teachers and other educational personnel have been involved in the change effort from original planning, to application to practice, to evaluation and revision of plans for action. The plan is a cooperative effort involving the State Department of Education, county school systems, teachers (as learners, trainers, and curriculum developers) and other organizations and institutions involving technology and education.

To date, the program has experienced success beyond the most favorable expectations. The question remains as to whether the objectives can be met and critical mass reached, thus providing a self-sustaining program for a critical area of the educational endeavor, namely, education in the technologies.

This report which describes the activities of programs carried out through the Appalachian Center for Teachers in the Technologies in fiscal year 1975.

David L. McCrory
Project Director
June 30, 1975

Progress Report

APPALACHIAN CENTER FOR
TEACHERS IN THE TECHNOLOGIES
July, 1975

I. Project Status

A. Introduction and Background

1. Purpose and Function: The Center for Teachers in the Technologies has been concerned primarily with people and their needs and competencies as teachers. The purpose, functions and scope of the programs of the center have changed and adapted as the needs, problems and competencies of the clients have been altered by the program and their continuing professional role. The purpose and functions are thus adaptable to change. The criteria for success of the Center and the criteria for continued operation has been whether the program of the center demonstrated to its constituency that the services of the center met identifiable and agreed upon needs. The center has not been in business to stay in business. It has been in business to help provide answers to the needs of teachers in the technologies by establishing contemporary and quality programs of instruction to meet the needs of the youth of West Virginia.

The present program was designed as a beginning stage in a multi-stage operation. It was designed as a pilot program utilizing limited resources. It was designed to provide answers with respect to the critical questions of (1) program and (2) structure rather than the commitment of extensive resources to limited experience, know-how, or professional competency.

The problem was to design and develop a structure and program which could reach critical mass; one that could provide sustained leadership and training in Appalachia for education in the Technologies. There was and is, of course, a present on-going day-by-day educational program in operation in Appalachia with considerable tradition and much momentum. The objective has not been to build a totally new structure or program. The objective has been to work with what is; to start from where the schools are. The question was and is: "What is and how do we attain a critical mass that will alter or change present inadequate teaching-learning processes in the technologies?"

The assumption on which the Center has been based

is that the answers rest with the present teaching population. If real change is to be made in the teaching-learning process, the classroom teacher responsible for program operation at the local level must receive help. The functions of the Center for Teachers in the Technologies become evident as soon as this assumption is stated.

The Center serves the function of providing the State with a means for the development of personnel qualified and capable of meeting the educational problems of a changing technological society through procedures designed to increase the competency of these personnel in: (1) knowledge and performance in the areas of instructional strategies, (2) diagnostic skills, (3) facts, concepts, principles and processes of the discipline, (4) curriculum, (5) teaching-learning unit design and (6) instructional resources.

Many educators stress the need for change. They call for new curricula, new programs, new instructional media and pilot programs, all for the purpose of improving the educational process. However, change and improvement in the teaching-learning process take place only when people are ready for change; when people are prepared and have the competencies to initiate and carry out change. The center serves these important functions. It increases the competency levels of teachers so they are more secure with change, more capable of engaging the questions of the quality of instruction, and more knowledgeable about the structure of the schools in relation to learning inhibition and good teaching.

The emphasis, therefore, has been and will be on the individual teacher and his development as a self-sustaining teacher-scholar capable of engaging the questions and meeting the challenge of change. This process requires continual training and improvement in competence from the colleges, universities or public agencies to the individual.

At the same time, it has been evident the center must accept the task of identifying and training personnel for operations at the local, county and district levels. This goal is in keeping with the purpose of studying, developing, evaluating and initiating those activities which have the greater certainty of multiplying the initial effort. It is also in keeping with the objectives of direct involvement of teachers in the change process.

In addition, the issue of pilot programs is more easily met when better trained and knowledgeable personnel become available and support centers, such as the Appalachian Center for Teachers in the Technologies, exist to assure the success of each program. This, of course, raises the question as to the kind of staff required for the successful operation of a

teacher center in the technologies. Present evidence indicates that the training of teachers requires a staff which is far broader in both skill and expertise than is normally involved in typical in-service teacher education programs.

Engaging the teacher center question requires that the question of type and qualifications of training personnel be identified. In addition, the center must develop procedures for training future personnel so as to serve as a training base for local and regional teacher center endeavors.

The Center has as its mission not only the improvement of instruction through the re-training of individuals but also the role of an "outside force". The Center is "neutral" if not in a physical sense at least in a functional sense. It has no formal attachment to specific school systems served except through specific contractual arrangements. It has no formal attachment to specific University or state education department structures other than to draw upon available resources. The Center has been designed to exist as an autonomous entity. It has been designed, structured and programmed to fulfill specific roles. It is designed to draw together resources needed to solve problems rather than expend energies to identify problems suitable for existing resources. The mode of operation is through an open rather than a closed system.

2. The Technology Model - Rationale: Fundamental to the design of the Center was the selection of a model from which structural and programmatic decisions could be made. The present design is based on a technology model with the assumption that self-realization, self-assurance and improved performance are attained by teachers as their level of competency is raised. Competence and the "ability to do" enhance self-realization and self-assurance; critical elements in a successful teaching-learning equation.

The model, as conceived, meets the teacher center concept of providing brief, intensive opportunities for training in specific identified areas. Of the two training phases, pre-service and in-service, the present center has been concerned primarily with the in-service phase.

Concentration on in-service problems is based upon the tenet that the way problems are solved and situations changed is by "starting from where you are". A teacher center utilizing the technology model concentrates on solving problems related to improving instruction in an economical and efficient manner. The issue is one of putting to work knowledge and techniques already available. Some of the basic premises are:

1. that the tasks to be identified will be those which teachers and others express as needs or which, as a result of involvement in the programs, teachers find relevant,

2. that tasks will be those which can be specified in performance terms and attainable in a short period of time and,

3. that teacher centers exist to provide services to local or regional educational personnel on contractual and other bases and that the success of the center will be measured in terms of continued use on the part of its clients.

The technology model starts from where the individual is. It operates on the principle that competence is attained in short, specific, incremental stages. The approach centers on tasks which are action or doing oriented. Problems are analyzed and divided into small segments suitable for short, highly defined training sessions. Immediacy and application to practice are the keys. The model is constant and on-going, utilizing all resources and expertise on an ad hoc basis as required by program goals and individual needs. The task analysis approach is used. Specificity is emphasized and the following assumptions utilized as a base.

...when performance expectations can be defined in precise behavioral terms, systems can be developed to prepare teachers to perform them.

...when variables enter into performance expectations, a series of diagnostic questions can be designed to aid in the definition of the problem. The model suggests that teachers can be prepared to ask these diagnostic questions and to apply appropriate solutions or select appropriate learning systems for students.

...when a reward or payoff is within sight, behavioral and attitudinal changes are not only probably but reasonably certain.

...when teachers see specific connections between their training program, their resultant proficiency on the job, and the level of status or responsibility or income for which the training is to prepare them, their attitude toward the training will be more positive.

Involvement with the technology model indicates several other characteristics which should be noted. The focus is on the individual. Each individual becomes involved directly in the identification and development of his own improvement. The attempt is to develop awareness of potential and the skills and competencies required to attain a given competency level. The technology model concentrates on "What is to be". It is action oriented. It is designed to improve the teaching-learning environment including the modes of thinking, doing, acting and performing related to that environment.

The model is problem centered. It is, therefore, process oriented, future oriented, adaptable and flexible. The emphasis is on problem solving and the methods of attacking problems using knowledge and techniques rather than problem doing which places the emphasis on studying a body of knowledge for its own sake and dealing with problems already solved. Operated at its maximum potential, the model provides for projection, analogy and a basis for assessment based on economy and efficiency, both physical and human.

The task analysis, performance-based model, with its implied hierarchy of attainments and goals, requires different structural, programmatic and operational modes. The present program is designed to determine which structures, programs or operational modes are most valid.

3. The Program - Basic Considerations: Analysis of individuals who perform consistently at high levels indicates a lengthy training process built in small incremental segments. Each increment or segment adds to the repertoire of the individual and increases his competence level. A high level of performance is reached in a step-by-step procedure and attained when the total, consisting of all the parts, is put together into a meaningful whole. Unfortunately for many teachers, some of the parts are missing and a vision of the whole is never attained.

Many solutions have been proposed to correct these voids. Unfortunately, most methods and procedures are so complex that highly trained experts are required in their application, making the solution low in efficiency and high in cost. In addition, the goal of disseminating training procedures to the local school level is obviated. The technology model assumes the function of the teacher center is to find the means to teach all who are capable how to use and apply new techniques. Teachers have no faith in techniques which can be applied only by experts. This means the structure and program of the teacher center must be geared to actual operational problems faced by teachers.

The concept of "starting from where we are" is basic if real change is to take place. It is very difficult, if not

impossible, to introduce readically new ideas without a lengthy period of preparation. Programs geared to actual operations have a greater chance of success and provide a much better base for continual change than do either short or long-term in-service programs begun on too sophisticated a level or based on foreign, radical or esoteric ideas.

The real issues involved are ones of structure and program.

4. Structure and Program: The structure of the Appalachian Center for Teachers in the Technologies is based on an ad hoc contractual plan. This provides a flexible dynamic system capable of meeting the immediate and long-range needs of the people of West Virginia. The ad hoc contractual plan is compatible with the technological model and has the great advantage of maximum flexibility.

The approach, properly managed, is adaptable to change as contrasted with the relative inability of existing institutional approaches to teacher education in the technologies. There are many examples of the failure of various institutionalized training and education programs developed two, three, or four decades ago to come to grips with contemporary problems and needs. They continue to operate out-of-date programs which produce out-of-date people while using the limited resources to reach inappropriate goals inefficiently. It is obvious that contractual arrangements for space, equipment, materials and instructional personnel provide the citizens of the State with a system superior to the establishment of permanent buildings, staff and programs which become quickly dated and in reality stand in the way of progress utilizing resources rather than solving problems.

The ad hoc contractual approach requires a new concept of the education delivery and support system for teacher education in the technologies. Several elements are primary, including the establishment of:

1. A management, contract, program and control system.

2. A Technology Research and Resources Center for: (1) the education and training of personnel for specific training tasks and (2) the development of curriculum and teaching materials.

3. A planned Program for the Study of Technology and Human Resource Development as a base for the development of present and future endeavors by the West Virginia Teacher Center for Teachers in the Technologies in meeting the evolving needs of the people

and institutions of the state.

4. A human resources research, development and program evaluation system.

B. Program Objectives - Primary. The Center, at this stage of development, has a number of objectives related to its mission which are primary in nature.

1. Organizational-Operational.

(a) Provide direct, tangible and specific leadership for the people of the state in meeting the needs of education in the technologies, at all levels, through the most economical and efficient means by serving as a research, resource and personnel training center.*

(b) Study, develop, evaluate and initiate those activities which have the greater certainty of multiplying the initial efforts in increasing the quality, scope, and effectiveness of teacher education programs in the technologies in Appalachia Region.*

(c) Provide the Region with an enterprise dedicated to aiding the people and those engaged in efforts to meet the needs of youth and adults in education in the technologies with an "outside force" designed to create favorable climates conducive to adequate motivation, sustained systematic planning and effort required to aid the Region and its people to rise above non-adaptive educational patterns in the technologies.*

(d) Develop and initiate an effective and highly selective communication system for the state related to meeting the problems and needs of education in the technologies which contains a "sensing" system to determine weaknesses in the educational effort and a "scanning system" designed to located information and resources pertinent to the solution of identified problems.*

(e) Design, develop and operate an exemplary technological education research and resource facility adaptable to educational and technological changes and capable of meeting the needs of the teacher center.*

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* Indicates objectives met or being attained. Other objectives are part of later phases.

(f) Study, develop, initiate and evaluate change strategies suitable for improving education in the technologies in Appalachia.*

2. Instructional - Educational

(a) Design, develop and implement procedures for monitoring the educational process in the technologies at all levels of education, both formal and informal, for the purpose of identifying present and projected human resource needs. (Research on this objective has been conducted).

(b) Design, develop, initiate and evaluate short-term training and retraining programs in the technologies for teachers in the field at all levels of education, both formal and informal, for the purpose of providing the region with personnel qualified and capable of meeting the educational problems of a changing technological society through procedures designed to increase the competency of these personnel in knowledge and performance in the areas of curriculum design, materials of instruction, technical content, instructional strategies and leadership.*

(c) Identify and develop a taxonomy of teaching skills from which to determine selected instructional program offerings for implementation by the teacher center for teachers in the technologies.*

3. Field and Community Service:

(a) Design, develop and initiate an in-service educational model which meets the following criteria:*

(1) motivates individuals toward continuous learning and maintains, improves and adds to the competencies of those teaching in the technologies at various levels of education within the state,

(2) is flexible and adaptable to educational and technological change, and

(3) is capable of serving the needs of individuals or groups within the local community, at regional centers or at the State Technology Teacher Training Center depending on need, complexity of instruction and resources required.

(b) Develop a Regional Organizational Model to serve as a resource for the initiation and operation of programs for the solution of localized and immediate educational problems in the technologies as a means of multiplying the effort and increasing the cost effectiveness of the teacher center.*

(c) Provide technical and educational field assistance for all levels of technological education in the region.*

(d) Establish, in selected urban and rural areas of the region, experimental and exemplary pilot programs designed to provide leadership in meeting the needs of education in a technological society.*

(e) Utilize pilot program facilities on a contractual basis for in-service education programs in the technologies.*

(f) Coordinate and provide liaison activities with other organizations and enterprises in the state concerned with technology and human resource development.*

4. Education and Technology Resources:

(a) Design, develop and evaluate program models, instructional models, materials of instruction, resource materials, teaching-learning units, physical facility design and other software materials required for experimental, pilot and operating programs in the technologies as a part of the technical, field service and outreach functions of the teacher center in meeting the needs of the state.*

(b) Develop, organize and publish a master technological education resource file identifying human, physical and published resources available to meet selected instructional and training needs.*

(c) Identify, evaluate, select and publish a descriptive listing of basic readings and resources for study in the technologies at several learning levels.*

C. Program Objectives - Secondary. In addition to the primary objectives concerned with rather specific areas of endeavor, the teacher center must engage activities related to objectives similar to the following.

(1) Determine the specific nature of the many tasks related to the proper functioning of a teacher center for teachers in the technologies and establish a training hierarchy both in terms of personnel and the competencies required.*

(2) Study, develop and select reward structures which enhance the productivity of training programs for teachers in the technologies and promote interest in self improvement.*

(3) Evaluate the many types of performance categories required for the proper functioning of training programs for teachers in the technologies and determine the potential optimum utilization of scientific and engineering manpower.*

(4) Conduct a study of the type and nature of services desired and required by teachers and instructional programs. Utilize non-directive data gathering devices to determine needs as well as exploratory discussions of the future to determine potential needs.*

(5) Investigate, evaluate, select and prepare guidelines for the operation of several models of contractual programs.*

(6) Explore, assess and determine the potential of establishing a multiple funding consortium for the diverse activities and needs of a teacher center for teachers in the technologies.*

(7) Design, develop, initiate and operate at least one pilot training center in the technologies in each county or education region in West Virginia for the purpose of establishing a change model in an actual setting and as a modern base for future training programs for teachers in the technologies.

(8) Establish minimum standards for the facilities and operation of training facilities.*

(9) Investigate the practicability and potential of specifically designed mobile technology training laboratories for specialized areas of technology.*

II. Activities and Accomplishments:

The activities and accomplishments of the Appalachian Center for Teachers in the Technologies have been dictated by the basic assumptions underlying the technology model and the goals and objectives of the Center.

A. Operation:

The operation phase (1971-75) of the Appalachian Center for Teachers in the Technologies consisted of a multi-faceted program with numerous major endeavors, including regional in-service teacher education programs, a training-of-trainers

program with field application, a contractual teaching-learning unit development program, and experimental program on the study of technology in the elementary school, and a cooperatively formulated and a contractual program for the development of a new structure for the study of technology for several county school systems. Programs were cooperatively initiated and conducted by State Department of Education personnel correlated by the State Supervisor of Industrial Arts who served as a liaison member between the county school systems and the teacher center.

The activities of the Teacher Center during 1970-72 served as a base to determine direction for the 1972-73 effort. Among the priorities from previous years were: (a) the development of a Training Model for implementing change and (b) determination of a means of disseminating information to teachers, administrators and others about technology, education and society. The 1971-72 Final Report listed the primary conditions for educational change. They included:

1. direct involvement of participants in the change process,

2. immediate feedback to participants of the consequences of their behavior,

3. utilization of activities perceived to the relevant by the participant,

4. carefully designed learning activities obviously directed to attainment of the established purposes, and

5. application to practice in field settings of activities as part of the change process.

In addition to the above, it has become evident that involvement of administrators, curriculum specialists and principals is imperative before organized change can occur. Therefore, specific activities designed to involve this group of educators must be included in the change model. For example:

1. analysis of the role of administrators, including superintendents, supervisors, curriculum directors and principals, must determine levels of involvement of each in determining direction for change in the local system,

2. Determination of inducements which create personal commitment for planned change, and

3. responsibility for successful change must be shared by all administrators if change is to become a continuous process.

The commitment of administrators is critical if the teacher implementing change is to receive the support necessary to assure success of the planned change.

The continued functioning of any change process is based upon adequate patterns of communication. The State Department of Education Program Specialist for Industrial Arts, has been instrumental in establishing initial communication links between the Center and local education agencies, including individual classroom teachers.

The establishment of a consistent pattern of communication with administrators and classroom teachers included components such as the following:

1. Newsletters describing the Center activities with names of local teachers and administrators in the news items.

2. Brochures explaining the purpose and function of the Center and enumerating the services available.

3. Personal visits by staff members to explain projects and services. This procedure served as a primary source for feedback in identifying current concern of classroom teachers and educators.

As an ad hoc agency, the Center responds to the requests of clients. Therefore, the activities have varied with expressed needs.

Six projects received emphasis during 1974-75:

1. Metric System

2. Teaching-Learning Units

3. Elementary School Technology

4. Technology Education Research and Resource Center Development

5. TPTT Contractual Services

6. Project Open Programs

7. Aerospace Education Programs

The variety of program needs necessitated subdividing responsibility and selecting team members whose interests, background and personal effectiveness could contribute to specific areas of the program and the success of the total program. A brief description of each activity follows.

B. Metric System:

Due to the impact of a national changeover to the metric system of measurement, many school teachers and administrators are concerned with upgrading their skills and understanding regarding metrics. During the project year 1974/75, the Center developed and provided in-service training workshops on metrics.

The main objectives of training sessions were:

1. To inform teachers about the state of the art in the changeover to metrics,

2. to provide an overview of the nature of the metric system of measurement, and

3. to develop some classroom-ready learning activities using the metric system.

Feedback during and after the workshops revealed evidence of a high degree of interest by teachers, as well as successful achievement of the three objectives above.

C. Teaching-Learning Units:

As a continuing effort to develop the concept of precision Teaching-Learning Units (TLU), the Teacher Center operated an intensive program of seven training sessions for teachers, in which each of the participants developed a ten minute TLU on a technical concept. The participating teachers later used the units in their classrooms and were evaluated by Teacher Center training personnel.

D. Elementary School Technology:

Building upon the development begun by the Teacher Center under previous USOE grants, another Elementary School Technology Conference was offered in 1974-75 with the cooperation of the West Virginia State Department of Education.

Key educators in elementary school technology from the United States were brought together with Appalachian elementary teachers and teacher educators to examine current theory and practice. Some sixty (60) educators from seven states participated in the Elementary School Technology Conference and its

training sessions. The conference agenda is located in the 1974 Progress Report.

E. Technology Education Research and Resource Center:

The purpose of the Technology Education Research and Resource Center (TERRC) is to assist in the education and training of personnel for specific tasks, as well as to identify and develop curriculum and teaching materials for technological education. Pursuit of these purposes, as well as the inherent support tasks involved, constituted the major work of the TERRC. The following provides a brief survey and description of the activities undertaken during the past year.

Re-Classification of Resources:

With the expansion of the Center into an additional building, much-needed space was made available in the building which houses the CRRC. The additional space made possible a thorough re-classification and shelving of hard and soft resources, following the taxonomy developed in previous research. The resources are now much easier to retrieve by teachers and teacher educators in the application of knowledge to the realities of practice.

Technology Bookshelf:

An ongoing project, the myriad of commerical resources available for technology education was surveyed for application to real school situations. Selected items were purchased for the TERRC and classified for review and use by educational personnel.

F. TPTT Contractual Services:

During 1974-75 the Appalachian Center for Teachers in the Technologies expanded on the foundation of the 1970-74 efforts. The Teacher Center offered the following services on a regular or ad hoc contractual basis to schools in the Appalachian Region.

1. In-service Education in the Technologies (Teachers-Supervisors-Administrators)

   Workshops
   Clincs
   Special Courses

2. Curriculum Research and Program Development

   Preparation of Funding Proposals

Pilot Programs
Course Revision
New Courses
Staff Training
Physical Facility Design
Design of Instructional Strategies and Materials
Consultant Program

3. Special Programs

Career Development
Library Resource Planning
Technology and Educational Reference Service
School Technology Program
  Elementary
  Middle School,Secondary School
Curriculum Evaluation
Information Programs on New Technologies

4. Other

Educational Packets
Film Rental
Instructional Materials
Instructional Devices
Resource Bibliographies
Technology Bookshelf

G. Project Open Programs:

Months of negotiations and cooperative planning with school systems and the West Virginia State Department of Education continued in 1974-75 with the expansion of Project Open programs in three county school systems.

1. At Wahama Junior High School in Mason County, West Virginia, a team of two teacher/scholars implemented the second year curriculum development phase consisting of an 8th grade course in Technology Education. The course, called Career Exploration in Techology, was taught to all 8th grade students.

2. At Hundred High School in Wetzel County, West Virginia, a teacher/scholar provided the second of three years of curriculum revision and teacher in-service programs to upgrade and expand existing technology education courses for students in grades 9-12.

Capabilities of TPTT which had been developed in previous years were instrumental in the success of the Project Open

programs. The projects were so successful that during 1974-75, new Project Open Programs in addition to those above were implemented in these locations:

1. At Pt. Pleasant Junior High in Mason County, West Virginia, a team of two teacher/scholars developed and began implementing a technology education course for 8th grade students.

2. At Paden City High School in Wetzel County, West Virginia, a teacher/scholar began a curriculum revision and in-service program for grades 9-12.

3. At Cox's Landing Junior High School in Cabell County, West Virginia, a teacher/scholar engaged in the development of a new Unified Arts curriculum program for grades 8-9.

H. Chronology of Activities 1974-75:

1. Faculty advisory meeting for all Project Open personnel (July 3).

2. TPTT planning meeting for the 1974-75 year (July 11).

3. Coordinator's field observation of Cabell County Project Open (July 15).

4. Project Open planning meeting for the 1974-75 year (July 18).

5. Special workshop on unified arts for Cabell County teachers (July 22 - August 3).

6. Aerospace education workshop for teachers (Aug.5-16).

7. Teacher Center staff development seminar on career education (September 20).

8. Coordinator's field observation in Mason County (September 23).

9. Inservice workshop on unified arts for Mineral County teachers (October 9).

10. Faculty seminar on evaluation of field projects (October 23).

11. Teacher Center staff development seminar on integrated machine systems (November 21).

12. Inservice workshop on the S.I. Metrics system for Preston County teachers (November 25).

13. Staff development seminar on conceptual learning (December 1).

14. Inservice workshop on Unified Arts for Cabell County teachers (January 20).

15. TLU session (February 22).

16. Elementary School Technology Conference (March 2-4).

17. TLU Session (March 15).

18. TLU Session (April 5).

19. Project Open field review in Mason County (April 23).

20. Presentation on aerospace education - Monongalia County (May 7).

21. TLU Session (June 7).

22. Inservice Workshop on the S. I. Metric system for Pocahontus County teachers (June 11).

APPENDIX A

Inservice Workshop Descriptors

West Virginia University | MORGANTOWN, WEST VIRGINIA 26506

College of Human Resources and Education
Technology Education Program

May 20, 1975

Dear Coordinator(

May we help you provide inservice training for your faculty and staff?

Our team of Training Associates working with the Training Program for Teachers in the Technologies (TPTT) can provide inservice workshops on a variety of topics. For your convenience, prospectus sheets on several workshops are enclosed with this letter.

Workshop topics were selected from a list resulting from a recent survey of inservice needs in West Virginia schools. Workshops on additional inservice topics may be developed on special request.

If your school system is now scheduling inservice programs for next year, we suggest that you immediately:

1. Consider each of the Workshop Prospectus Sheets attached.
2. Select the workshop(s) which might fit the needs of your faculty.
3. Contact the Training Program for Teachers in the Technologies to make the arrangements.

Thank you for your consideration, We look forward to hearing from you.

Sincerely,

David L. McCrory

David L. McCrory
Coordinator of Field Services
(304) 293-5439

DLM/cjk
Enclosures

TECHNOLOGY: CHANGING THE DIRECTION OF MAN

THE HUMAN(E) USE OF ENERGY

AN INSERVICE WORKSHOP FOR BUSY EDUCATORS

Scope and Purpose

The Energy Workshop is organized to help teachers better understand what energy is, how we use it, and what changes are in store for us in the future. The workshop is designed to provide new information and techniques for improving instructional programs in science, math, art, music, home economics, industrial arts, social studies, and career education.

Program

The Energy Workshop program revolves around three basic questions:

1. What are the current types and sources of energy?

2. How can we use energy more humanely?

3. What alternative types of energy are possible in the future?

Teachers participating in the workshop will experience a variety of activities, including demonstrations, experiments, lectures, and media reviews. Although the emphasis is on new content for instruction, the workshop program keeps in mind the real-world applications of energy in the home and community.

Time

The Energy Workshop is designed as an intensive all day (6 hours) experience for 50 persons. Other options on time arrangements are available to fit specific inservice situations.

Credit

Continuing Education Unit (CEU) credit is available to all participants at no cost. Graduate credit from West Virginia University is also available for participants who pay regular tuition and fees.

Cost

The Energy Workshop is provided on a cost-reimbursable basis for expenses incurred in travel, meals, and lodging of the workshop staff and for development of workshop materials. A typical six-hour workshop costs under $200 to produce and implement.

Arrangements

For workshop arrangements, or discussion of specific school needs, contact:

Training Program for Teachers by the Technology-[illegible] University Ave Morgantown, WV 26506

TECHNOLOGY: CHANGING THE DIRECTION OF MAN

THE S.I. METRICS SYSTEM

AN INSERVICE WORKSHOP FOR BUSY EDUCATORS

Scope and Purpose

The purpose of the Metric Workshop is to make teachers of all subjects aware of the nature of the international metric system of measurement and how metrics might be intergrated with all school subjects.

Program

The Metrics Workshop program consists of a variety of activities, including: (1) presentation on the development of the metric system and it's status on the international level with implications for the S.I.; (2) viewing of, and learning from, the latest classroom media dealing with metrics, including filmstrips, cassettes, films, and games; (3) "hands on" use of metrics in preparing a "metric meal"; (4) involvement in several metric classroom activities; and (5) seminar time for teachers to share and synthesize ideas for classroom use.

Time

The workshop is designed as an intensive all-day (6 hours) experience for 50 participants. However, arrangements can be made for individual needs and circumstances.

Credit

Continuing Education Unit (CEU) credit is available to all participants at no cost. Graduate credit from West Virginia University is also available for participants who pay regular tuition and fees.

Cost

The Metrics Workshop is provided on a cost-reimbursable basis for expenses incurred in travel, meals, and lodging of the workshop staff, and for development of workshop materials. A typical six-hour workshop costs under $200 to produce and implement.

Arrangements

For workshop arrangements, or discussion of specific school needs, contact:

Training Program for Teachers in the Technologies-2925 University Ave Morgantown, WV 26506

TECHNOLOGY: CHANGING THE DIRECTION OF MAN

CURRICULUM DEVELOPMENT FOR TECHNOLOGY EDUCATION

AN INSERVICE WORKSHOP FOR BUSY EDUCATORS

Scope and Purpose

The Curriculum Development Workshop is organized to help teachers and supervisors to update their instructional programs for industrial arts and technology and its related subjects.

Program

Content in the Curriculum Development Workshop centers around three major content areas of:

* Transportation
* Production (Construction and Manufacturing)
* Communication

By experiencing demonstrations, simulations, and media presentations, participants explore the possibilities of new content and methods for teaching about the technologies.

Time

The Curriculum Development Workshop is designed as an intensive all day (6 hours) experience for 50 persons. Other options on time arrangements are available to fit specific inservice situations.

Credit

Continuing Education Unit (CEU) credit is available to all participants at no cost. Graduate credit from West Virginia University is also available for participants who pay regular tuition and fees.

Cost

The Curriculum Development Workshop is provided on a cost-reimbursable basis for expenses incurred in travel, meals, and lodging of the workshop staff, and for development of workshop materials. A typical six-hour workshop costs under $200 to produce and implement.

Arrangements

For workshop arrangements, or discussion of specific school needs, contact:

Training Program for Teachers in the Technologies-2928 University Ave Morgantown, WV 26506

TECHNOLOGY: CHANGING THE DIRECTION OF MAN

WHATS UP WITH AEROSPACE EDUCATION

AN INSERVICE WORKSHOP FOR BUSY EDUCATORS

Scope and Purpose

The Aerospace Workshop is organized to help teachers and guidance counselors better understand our place in space and in the air. The workshop is designed to provide new information and techniques for improving instructional programs in industrial arts, science, math, art, home economics, social studies and career education.

Focus for the workshop is provided by four basic questions: How did we learn to fly? Where have we been? Where are we now? Where will we be going next?

Program

The Aerospace Workshop Program is divided into two major sections: (1) general aviation and (2) space exploration. The workshop includes topics such as:

- Aircrafts design
- Careers in aviation
- Theory of flight
- Interplanetary travel
- Space environments
- Air navigation
- Weather
- History of Flight
- Research in outer space
- Space spinoffs

Workshop activities include demonstrations, simulations, lectures, experiments, and reviews of instructional resources. Emphasis throughout the workshop is on classroom situations, and how aerospace topics and resources can be used to enhance ongoing programs.

Time

The Aerospace Workshop is designed as an intensive all-day (6 hours) for 50 teachers. However, arrangements can be made for individual school needs and circumstances.

Credit

Continuing Education Unit (CEU) credit is available to all participants at no cost. Graduate credit from West Virginia University is also available for participants who pay regular tuition and fees.

Cost

The Aerospace Workshop is provided on a cost-reimbursable basis for expenses incurred in travel, meals, and lodging of the workshop staff, and for development of workshop materials. A typical six-hour workshop costs under $200 to produce and implement.

Arrangements

For workshop arrangements, or discussion of specific school needs, contact:

Training Program for Teachers in the Technologies-2025 University Ave Morgantown,WV 26506

TECHNOLOGY: CHANGING THE DIRECTION OF MAN

FACILITY PLANNING FOR TECHNOLOGY EDUCATION

AN INSERVICE WORKSHOP FOR BUSY EDUCATORS

Scope and Purpose

The Facility Planning Workshop is organized to help teachers, administrators, and architects better understand the special facility needs of instructional programs in the technologies.

Program

The Facility Planning Workshop is designed to identify the important factors to be considered in planning, including:

* Selection of tools and equipment
* Utilities (i.e. Electrical, water, sewer, compressed air)
* Placement of furniture and equipment
* Climate controls
* Curricular considerations
* Facility management and safety

Through audio-visual presentations, demonstrations, and simulations, participants will explore options for existing facilities and for facilities to be constructed.

Time

The Facility Planning Workshop is designed as an intensive all day (6 hours) experience for 50 persons. Other options on time arrangements are available to fit specific inservice situations.

Credit

Continuing Education Unit (CEU) credit is available to all participants at no cost. Graduate credit from West Virginia University is also available for participants who pay regular tuition and fees.

Cost

The Facility Planning Workshop is provided on a cost-reimbursable basis for expenses incurred in travel, meals, and lodging of the workshop staff, and for development of workshop materials. A typical six-hour workshop costs under $200 to produce and implement.

Arrangements

For workshop arrangements, or discussion of specific school needs, contact:

Training Program for Teachers in the Technologies-2925 University Ave Morgantown,WV 26506

TECHNOLOGY: CHANGING THE DIRECTION OF MAN

UNIFIED ARTS IN THE MIDDLE GRADES

AN INSERVICE WORKSHOP FOR BUSY EDUCATORS

Scope and Purpose

The Unified Arts Workshop is organized to help teachers and administrators better understand the workings of an interdisciplinary approach to organizing industrial arts, art, and home economics in junior high and middle schools. The workshop is designed to answer three basic questions about the unified arts approach: What is it? Why do it? How is it done?

Program

Content in the Unified Arts Workshop concentrates on several topics, including:

* Curriculum consideration
* Class scheduling
* Teacher inservice and planning
* Physical facility requirements

Through a series of demonstrations, simulations, and lectures, participants in the Unified Arts Workshop are made aware of the Unified Arts approach and its implications for the school curriculum. Wherever possible, the workshop is custom-fitted to the participants specific school situations.

Time

The Unified Arts Workshop is designed as intensive, all day (6 hours) experience for 50 persons. Other time arrangements are available to fit specific school needs.

Credit

Continuing Education Unit (CEU) credit is available to all participants at no cost. Graduate credit from West Virginia University is also available for participants who pay regular tuition and fees.

Cost

The Unified Arts Workshop is provided on a cost-reimbursable basis for expenses incurred in travel, meals, and lodging of the workshop staff, and for development of workshop materials. A typical six-hour workshop costs under $200 to produce and implement.

Arrangements

For workshop arrangements, or discussion of specific school needs, contact:

APPENDIX B

Typical Field Training Activities

METRIC WORKSHOP

TUCKER COUNTY, WEST VIRGINIA
AUGUST 28, 1975

9:00 a.m.	INTRODUCTIONS
	* Purpose of the Workshop * Agenda and Procedures * TPTT Staff Introductions
9:15 a.m.	A NATION GOING METRIC
	* Visual Presentation of Status of Metric System
10:00 a.m.	METRICS MEDIA
	* Exemplary A-V Material * Review and Critique
11:10 a.m.	MEDIA OPINION SESSION
11:30 a.m.	LUNCH
12:30 a.m.	METRICS IN THE CLASSROOM
	* Instructional Activity Presentations * TPTT Staff
2:15 a.m.	WRAP-UP SESSION
2:45 a.m.	ADJOURN

FLOW CHART OF WORKSHOP EVENTS (Proposed)

MONDAY 2:00-4:00
1. Orientation: Getting acquainted, socializing, becoming comfortable in the meeting room.

TUESDAY 9:00-4:00
2. Value Clarification:

TUESDAY 9:00-4:00
2. Value Clarification: Models & gaming designed to clarify personal assumptions about education (reading in "value category")

WEDNESDAY 9:00-4:00
3. Reading & Discussion: Developing an awareness of rational, purpose, goals and associated problems of unified arts. (readings in "Middle School" & "Unified Arts" categories)

THURSDAY 9:00-12:00
4. Review of State Curriculum Guides - Art, Industrial Arts & Home Economics: Use of "bar chart" & "listing" procedures to demonstrate commonalities of goals of 3 areas.

THURSDAY 1:00-4:00
5. Simulation of a planning method: Unifying by Title, Project, Theme, Concept; Use of systematic planning methods, guides, etc.

FRIDAY 9:00-12:00
6. Resource Tour: Illustration of (1) a strategy of research for developing unified arts programs, (2) resource materials and their locations

FRIDAY 1:00-4:00
7. Decision: The unifying vehicle to be used, some program plans and strategies for implementation.

Unified Arts
CURRICULUM DEVELOPMENT WORKSHOP
Project Open - Cabell County

Cabell County Team:
Theon Ashworth, Industrial Arts Teacher , Cox Landing Jr. High
Mary Fragulis, Home Economics Teacher, Cox Landing Jr. High
Marilyn Floyd, Physical Education and Science Teacher, Cox Landing Elementary

West Virginia University Team:
Dave McCrory, Coordinator of Field Services, Program for the Study of Technology Education
John Ritz, Training Associate, Project Open

Week One (July 15-19):
Place: Cox Landing Jr. High School, Cabell County
Time: 9 am to 4 pm daily (Monday am and Friday pm for travel)
Topics: Orientation to Project Open, Exploration of Facilities and Resources, Assessment of Needs, Identification of Goals for the Project, Planning of Strategies for Weeks Two and Three

Weeks Two and Three (July 22-26, July 29-August 2):
Place: Technology Education Resource Center, West Virginia University
Time: 9 am to 4 pm daily (Monday am and Friday pm for travel)
Topics: Curriculum Design Processes, Review of County, State, and Federal Guidelines, The Concept of Unified Arts in the Middle School, Evaluation Methods and Action Research, Development of Instructional Units, Planning for Week Four.

Week Four (August 5 - 9):
Place: Cox Landing Jr. High School, Cabell County
Time: 9 am to 4 pm daily (Monday am and Friday pm for travel)
Topics: Development of Instructional Plans, Formative Evaluation, Planning for First Semester.

Note: Daily schedule of events will be determined on the first day of the workshop and will remain flexible to respond to the needs of those participating. Resources of the Cabell County Administrative offices, as well as those of West Virginia University will be available on an as-needed basis.

West Virginia University | MORGANTOWN, WEST VIRGINIA 26506

College of Human Resources and Education
Technology Education Program

NEWS RELEASE

WEST VIRGINIA UNIVERSITY TO CONDUCT
AEROSPACE EDUCATION WORKSHOP FOR TEACHERS

Morgantown, West Virginia, April 15, 1975 -- Dr. David L. McCrory, Assistant Professor of Technology Education, West Virginia University, has announced an aerospace education workshop for teachers. The workshop will be held July 7 through July 18 at West Virginia University, Morgantown, West Virginia.

The Aerospace Education Workshop is designed to provide teachers with new knowledge and techniques to enrich their instructional programs. Workshop topics include careers in aerospace, history of aviation, alternative energy sources, space exploration, theory of flight, and more.

Program highlights include presentations by distinguished speakers from the National Aeronautics and Space Agency, Federal Aviation Agency, and the Civil Air Patrol. Field Trips, demonstrations, experiments, unit development, seminars, and presentations by guest instructors round out the workshop schedule. College credit is available.

For more information about this workshop contact Dr. David L. McCrory at 2925 University Avenue, Morgantown, West Virginia, 26506, phone (304)293-5439.

West Virginia University
Morgantown, West Virginia

1975 AEROSPACE EDUCATION WORKSHOP
July 7 - 18
For Teachers, Counselors, and School Administrators

SCHEDULE OF EVENTS*

First Week:

Monday, July 7 - Orientation to Aviation: Theory of flight, aircraft controls & power sources

Tuesday, July 8 - History of Flight: Military and commerical aviation.

Wednesday, July 9 - Air Navigation: Weather instruments, mapping.

Thursday, July 10 - Air Traffic Control: Commerical airports.

Friday, July 11 - Tour: Morgantown Airport Tower, FAA Control, fixed base operations, WVU facility and aviation research.

* Tentative, pending final arrangements

Second Week:

Monday, July 14 - Orientation to Aerospace Research: Technology in the service of man.

Tuesday, July 15 - Alternative Energy Sources: Wind and hydrogen energy.

Wednesday, July 16 - Planetary Exploration: The Mars viking mission.

Thursday, July 17 - Space Spin-offs: Earth Resources Technology Satellites (ERTS).

Friday, July 18 - Space Spin-offs: Transportation systems and medical technology.

WORKSHOP CONSULTANTS

National Aeronautics and Space Administration

Mr. Harold E. Mehrens
Educational Programs Officer
Langley Research Center
Hampton, VA 23365

Mr. David Goin
Assistant Education Programs Officer
Langley Research Center
Hampton, VA 23365

Civil Air Patrol

Mr. William J. Reynolds
Director of Aerospace Education
USAF CAP/LO Stop A-90
Andrews Air Force Base
Washington, D.C. 20331

Major Max W. Reed
Liaison Officer
West Virginia CAP
Kanawha County Airport
Charleston, WV 25311

West Virginia

Dr. David L. McCrory
Assistant Professor of Technology Education
2925 University Avenue
Morgantown, WV 26506

Mr. Jerry Robinson
Training Associate for Technology Education
2929 University Avenue
Morgantown, WV 26506

ELEMETRICS
September 17, 1975
Mason County

5:45	Registration
6:15	Introduction
6:25	A Nation Gojng Metric
6:40	Metric Media Review
8:05	Classroom activities
9:05	Wrap-up
9:15	Adjourn

Training Program for Teachers in the Technologies

TRAINING PROGRAM

FOR

TEACHERS IN THE TECHNOLOGIES

TLU Project Schedule - Meeting dates & description

*	February 22, 1975 -	All day program and design development, preparation and testing of TLU's. Place: Technology Education Teacher Center, 2925 University Avenue, Morgantown, WV.
	February 22 - thru - May 17, 1975	Design, development, preparation and testing of teaching learning units on a contract basis.
*	March 15, 1975 -	Training and assessment meeting. Progress report of unit design and development.
*	April 12, 1975 -	Training and assessment meeting. Progress report on unit design and development.
	April, 1975 -	Individual development meetings (if needed and by individual request).
*	May 17, 1975 -	Final report session. Presentation of completed teaching-learning unit for evaluation by training program staff and participants. Contract evaluation.

* requires attendance at 2925 University Avenue, Morgantown, WV for one full day.

TRAINING PROGRAM FOR TEACHERS
IN THE TECHNOLOGIES

Place: Curriculum, Research and Resource Center
West Virginia University

Time: February 22, 1975 - 8:30 a.m. - 4:00 p.m.

Goal: To identify program goals/procedures and to begin work on designing precision teaching-learning units for teachers in the technologies.

A G E N D A

"Development of Teaching-Learning Units"

8:30 a.m. Coffee and Introductions

9:00 a.m. Orientation to TPTT (operation, past efforts, objectives of TPTT, etc.) (D. McCrory)

9:15 a.m. Introduction to TLU Concept (G. Maughan)

1. The Concept

   (a) TLU Matrix
   (b) Relationship to TPTT
   (c) Development of Trainers for Unit Design

2. The TLU Program

   (a) Time Schedule (S. Bucholc)
   (b) Contract Approach (S. Bucholc)

3. Application to Practice

   (a) Multiplier Effect
   (b) Field Application Support

4. Philosophy - Less Cost, More Options

9:35 a.m. Teaching-Learning Unit Design

A. Content

   1. Man & Technology - Discipline Structure

2. Taxonometric Structures

(5 min.) (a) Transportation (B. Cupples)
(5 min.) (b) Communication (S. Bucholc)
(5 min.) (c) Production (J. Richter)
(5 min.) (d) Technology & Culture (L. Miller)

10:00 a.m. COFFEE

10:10 a.m. Teaching-Learning Unit Design

B. Process

(10 min.) 1. TPTT (TLU) Format (G. Maughan)
(10 min.) 2. The Learning Hierarchy (Teaching Technological Concepts) (G. Maughan)
(30 min.) 3. Selection & Preparation of Peformance objectives (S. Bucholc)
(10 min.) 4. Resources Available - CRRC & Others (B. Griscom)

(15 min.) C. Presentation of Prepared Teaching-Learning Unit

1. Sample TLU (G. Maughan)

11:25 a.m. D. Selection of TLU's (G. Maughan & S. Bucholc)

1. Discussion
2. Individual Consultation
3. Concept Identification

12:00 noon LUNCH

1:30 p.m. Concept Selection and Description of TLU's (Staff)

2:00 p.m. Preparation of Trial Contract Agreement (Staff)

3:00 p.m. Final Arrangements (S. Bucholc)

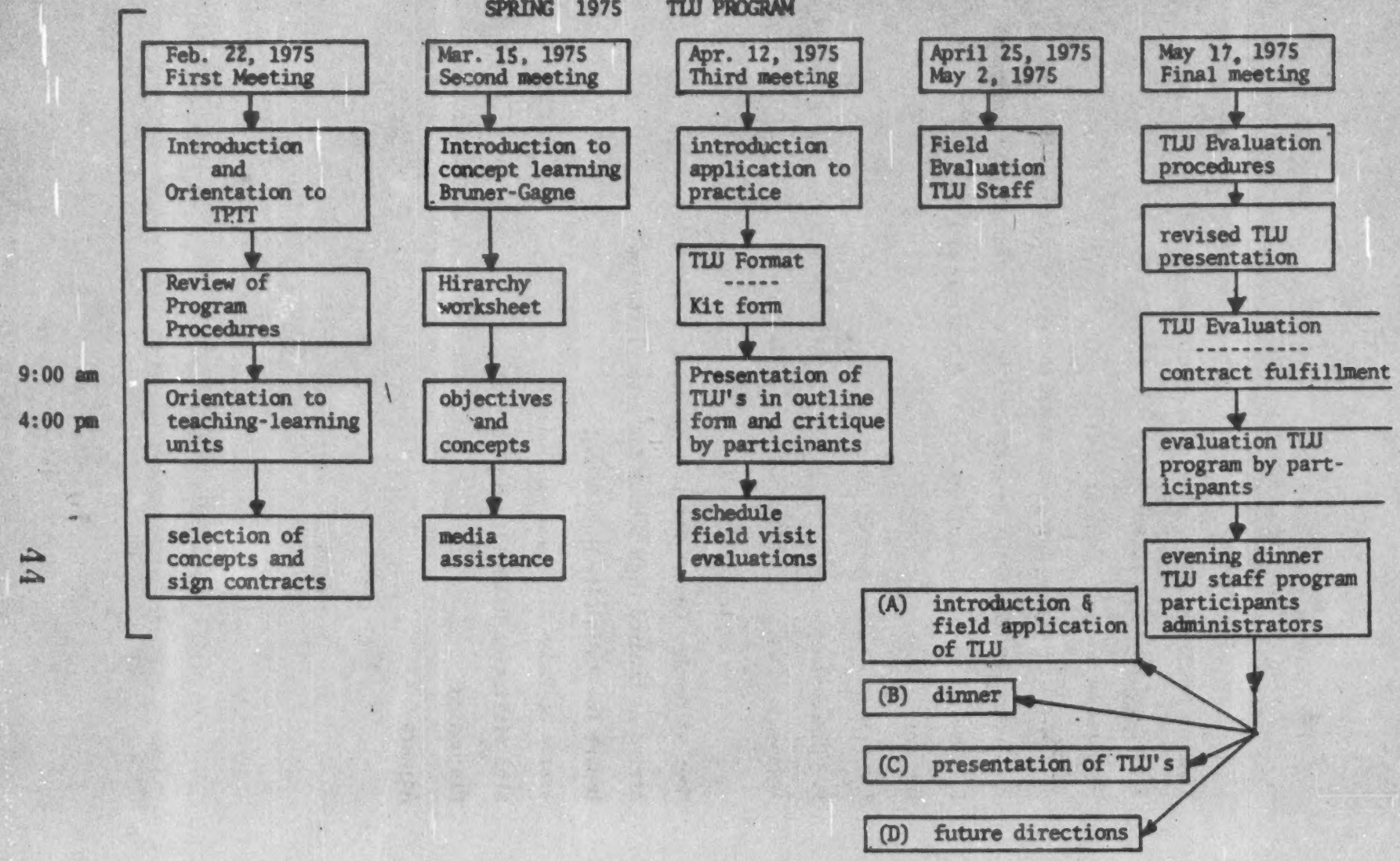
1. Contractual Arrangements

(a) Review Individual Contracts
- Contractual Statements
  1. What will be done
  2. When
  3. In what degree
- Written Record
- Final Review & Evaluation

2. Typing of Contracts

3:30 p.m. Summary - Discussion (S. Bucholc & G. Maughan)

1. Review of TLU Program
2. Funds Available
   (a) Materials supplied
   (b) Travel Expenses
3. Time Schedule
4. Completion of Final Contracts
5. CEU's


SPRING 1975 TLU PROGRAM
Feb. 22, 1975
First Meeting
Introduction and Orientation to TPTT
Review of Program Procedures
Orientation to teaching-learning units
selection of concepts and sign contracts
Mar. 15, 1975
Second meeting
Introduction to concept learning Bruner-Gagne
Hirarchy worksheet
objectives and concepts
media assistance
Apr. 12, 1975
Third meeting
introduction application to practice
TLU Format
Kit form
Presentation of TLU's in outline form and critique by particinants
schedule field visit evaluations
April 25, 1975
May 2, 1975
Field Evaluation TLU Staff
May 17, 1975
Final meeting
TLU Evaluation procedures
revised TLU presentation
TLU Evaluation
contract fulfillment
evaluation TLU program by part-icipants
evening dinner TLU staff program participants administrators
9:00 am
4:00 pm
(A) introduction & field application of TLU
(B) dinner
(C) presentation of TLU's
(D) future directions

Information Session for
Bureau of Vocational Education
State Department of Education
September 24, 1975

1:00 - 1:30	Tour of Teacher Center
1:30	Introductions (Dave McCrory)
1:40	Orientation Program (John Wright)
1:50	A. Training Program for Teachers in the Technologies (TPTT Team)
2:10	B. Technology Education Research and Resource Center (Gay Bindocci)
2:20	C. Project Open: Consultant Model (County Teams)
3:00	D. Coffee Break
3:10	E. Project Open: Teacher Model
3:40	F. Discussion
4:00	Adjourn

September 25, 1975

8:00	Meet at Teacher Center for trip to Hundred High School
9:00	Arrive at Hundred High School for site visitation
10:30	Depart for Paden City High School
11:30	Arrive at Paden City and eat lunch
12:00	Site visitation Paden City High School
1:30	Discussion
2:00	Adjourn

AGENDA

PROJECT OPEN BOARD REVIEW
February 11, 1975 - 7:00 P.M.

I. Leave Morgantown at 4:00 p.m. - February 11, 1975

A. People involved in transportation

1. Dr. David McCrory
2. James Snyder
3. John Wright (CAR)
4. Frank Trocki

B. Arrive New Martinsville at 6:30 p.m.

II. Project Open Review Report

A. Introduction - Dr. McCrory (5 min.)

B. Project Open Hundred Report (22 min.)

1. Introduction - John Wright (2 min.)
2. Overview of courses and projections

a.) Roy Brasher (10 min.)
b.) Loy Stull (10 min.)

C. Project Open Paden City Report (22 min.)

1. Introduction - F. Trocki (2 min.)
2. Overview of courses and projections

a.) Gary Witschey (10 min.)
b.) Gerald Bissett (10 min.)

D. Summary of progress - James Snyder (5 min.)

E. Roundtable discussion - John Wright (10 min.)

State of West Virginia
Department of Education
Charleston
25305

DANIEL B. TAYLOR
STATE SUPERINTENDENT
OF SCHOOLS

November 21, 1974

Dr. David McCrory
Field Director
Allen Hall, Room 609
West Virginia University
Morgantown, West Virginia 26505

Dear Dave:

Last year the conference on Elementary School Technology was a success and served as a real beginning toward new involvement in the elementary school.

It is time to develop the plans for our second annual EST conference and I wish to invite you to serve on our planning committee.

The date for meeting will be December 4, 1975 from 9:00 a.m. to about 3:00 p.m. The meeting site will be The Holiday Inn in Fairmont, I-79.

If you are unable to meet with us on that day, please call my office collect (348-3778) in Charleston and tell my secretary.

I am looking forward to meeting with you and developing a conference for this year. Bring ideas that would address the needs to further Technology education in the elementary schools.

Sincerely,

James F. Snyder

James F. Snyder
Program Specialist
Industrial Arts

bsc

Program

P

Sunday: March 2, 1975

3:00 - 5:00 p.m. Registration

7:30 p.m. General Welcome - General Session I
8:00 p.m. Why Elementary School Technology?
Panel Discussion by Selected Presenters
9:00 p.m. Mountain Culture
Adjournment

Monday: March 3, 1975

9:00 a.m. Conference Orientation
General Session II
Overviews by A.M. Presenters (Team 1)
10:00 a.m. Serendipity
10:30 a.m. Special Session I
Presentations by Individual Presenters
(assigned locations)
12:00 a.m. Lunch (on your own)
1:30 p.m. General Session III
Overview by P.M. Presenters (Team 2)
2:15 p.m. Serendipity
2:45 p.m. Special Session II
Presentations by Individual Presenters
(assigned locations)
4:15 p.m. Adjourn Afternoon Sessions
5:00 p.m. Dinner (on your own)
7:00 p.m. Special Session III
A.M. Presenters (Team 1) Repeat
Presentations
8:30 p.m. Fireside Seminar

48

Tuesday: March 4, 1975

9:00 a.m. Special Session IV
P.M. Presenters (Team 2) Repeat Presentations
10:30 a.m. Serendipity
11:00 a.m. General Session IV
Conference

A

Out-of-State Conference Attenders

Out-of-State Conference Attenders will fly in to Pittsburgh International Airport. Pittsburgh, Pennsylvania Limousine Service is available from the airport to Wilson Lodge, Oglebay Park, Wheeling, West Virginia. Arrangements must be made by the individual.

C

The Conference Center is located at Wilson Lodge, Oglebay Park, Wheeling, West Virginia accessable from Interstate 70.

Living quarters are deluxe including T.V., double beds, and large bath.

Dining room is located in the Lodge for your convenience with reasonable prices for excellent food.

Sponsored by the West Virginia Department of Education

41

APPENDIX C

Typical Planning Formats

TPIT TASK PLANNING WORK SHEET

Task Title Preston County Metric Workshop **Time** 9 a.m. to 3 p.m.

Task Leader Stan Bucholc **Activity Date** Monday, November 25

Objective To make workshop participants aware of the nature of the international metric system and how it might be integrated with school subjects.

Support Personnel	Duties
(1) McCrory	Odom's slides
(2) Cupples or Miller	Simulation on transportation
(3) Snyder and Hill	Simulation on production
(4) McCrory and Richter	Simulation on communications

Required Facilities: Preston County Educational Center, Kingwood, West Virginia

Required Equipment: (Hardware) Audio visual equipment, measuring devices for metric lunch.

Required Supplies: (Software) Resource packets, AV aids, registration materials, evaluation materials.

Other Requirements:

Activity Sequence: For suggested agenda, see agenda used for Cumberland, Maryland workshop.

Planning Notes: We expect 35 teachers in workshop, from all grade levels and all subjects. They are generally not sophisticated in using the metric system.

Revision Date _____ **Activity Sheet** 1 **of** 1

INSERVICE TRAINING REQUEST

WEST VIRGINIA UNIVERSITY
COLLEGE OF HUMAN RESOURCES AND EDUCATION
TECHNOLOGY EDUCATION PROGRAM

1. Who requested this workshop?

   Name: John D. Meyers

   Position/Title: Asst. Supt.

   Address: Kingwood, West Virginia

   Telephone: (304) 329-0580

2. What will be the major topic of the workshop?

   International Metric System

3. When is the workshop scheduled?

   Date: Nov. 25, 1974

   Time: 9 am - 3 pm

4. What is the purpose of the workshop?

   Orient teachers to the nature of the metric system & how it may be taught in the classroom

5. How many teachers will be participating?

   50

6. What subjects do the participants teach?

   All subjects, + some teacher aides in reading.

7. What grade levels do the participants teach?

K-12

8. Is the workshop required or optional?

Required_____ Optional X

9. What kind of inservice credit will the teacher get for this workshop?

County Inservice X
Continuing Education Units X
College Credit_____
Stipend or honorarium_____
Released Time_____
Other_____

10. What other inservice activities have these teachers participated in recently?

SPECIAL ED & READING

11. What other inservice activities are planned for the participants in the future?

INDIVIDUALIZED INSTRUCTION

12. How will the workshop be announced to the teachers? When?

BY LETTER FROM THE CENTRAL OFFICE
3 WEEKS BEFORE WORKSHOP.

13. Where will the workshop be held?

Name of building CAREER CENTER

Address KINGWOOD PIKE

KINGWOOD, WV

14. What kind of facilities are available at the workshop location?

Large group meeting room ✓
Shops or labs ✓
Small group meeting room ✓
INC ✓

15. What AV equipment is available at the workshop site?

16mm projectors ✓ Screens ✓
35 mm slide projector ✓ Filmstrip projector ✓
VTR ✓ Overhead projector ✓
Other

16. What refreshments will be provided?

Coffee ✓ Snacks ✓
Meal Other

17. Who will serve as host at the workshop site?

Name: JOHN MEYERS
Position/Title: ASST SUPT.
Address: ABOVE
Phone:

18. What are the finanical arrangements for the workshop?

COST REIMBURSABLE

19. Special Notes:

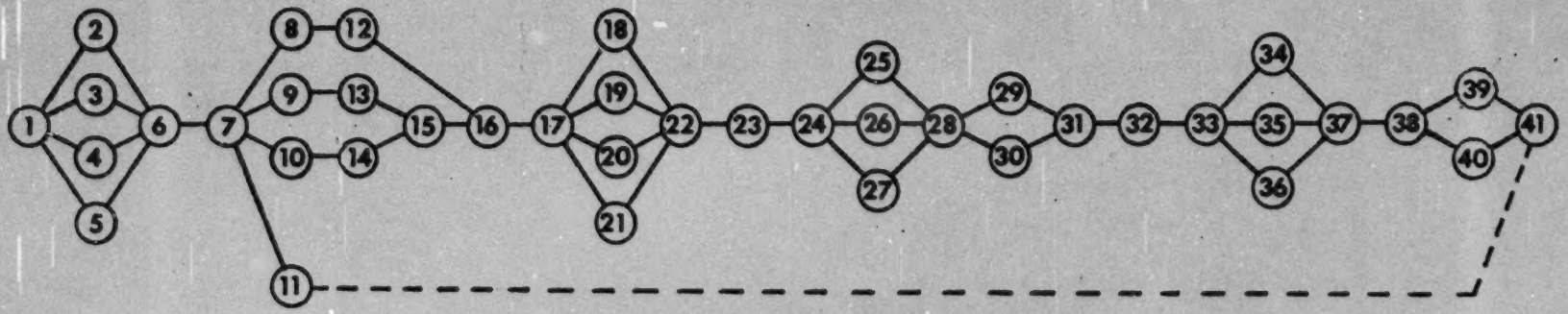
CONTACT CAREER CENTER DAY BEFORE WORKSHOP TO REQUEST SPECIAL NEEDS (ie: REFRIGERATION OF FOOD TO BE USED IN WORKSHOP).

DLM

11/1/75

Project Open – Cabell County

Revised Plan Of Action, March 1975



1. Scheduled visitation, Cabell County, 2-17-75.
2. Cox Landing Unified Arts observation.
3. Field Coordinator's visit with Superintendent of Instruction to discuss project & contract.
4. Field Coordinator's discussion with Practical Arts Supervisors concerning the future of Project Open - Cabell County.
5. Scheduled inservice session at Cox Landing.
6. Project Open - Cabell County Advisory Meeting, 2-25-75.
7. Revision of Project Open - Cabell County Plan of Action.
8. Selection of laison team leader for the Practical Arts Supervisors.
9. Selection of Unified Arts team leader for Cox Landing.
10. Synthesize Cox Landing teachers input.
11. Appoint a TPTT staff member to work with Cox Landing Elementary Technology Units.
12. Provide Practical Arts Supervisors with Unified Arts inservice sessions.
13. Continue Cox Landing visits with minor inservice.
14. Develop Unified Arts Curriculum Design at W.V.U.
15. Cox Landing teachers test curriculum design.
16. Evaluation of curriculum design by supervisors and teachers.
17. Conclude first year of project with a two day inservice.
18. Possible Unified Arts workshop for selected teachers.
19. Prepare 1974-1975 Project Report.
20. Finalize 8th grade Unified Arts Curriculum Design.
21. Begin preparation of 7th grade Curriculum Design.
22. End Phase I.
23. Begin Phase II.
24. Cox Landing and Practical Arts Supervisors inservice.
25. Cox Landing implementation of 7th & 8th grade Unified Arts curriculum designs.
26. Practical Arts Supervisors Unified Arts inservice.
27. Development of 7th grade Unified Arts Curriculum Design.
28. Finalize 7th grade Unified Arts curriculum design.
29. Prepare 1975-1976 Project Report.
30. Finalize 7th grade Unified Arts Curriculum Design.
31. End Phase II.

32. Begin Phase III.
33. Cox Landing and Practical Arts Supervisors inservice session.
34. Cox Landing implementation of 7th & 8th grade Unified Arts curriculum designs.
35. Practical Arts Supervisors Unified Arts inservice sessions.
36. Evaluate 7th & 8th grade curriculum designs.
37. Initiate County Unified Arts inservice workshops with the assistance of TPIT of W.V.U.
38. Evaluate overall results of Project Open - Cabell County.
39. Publish Cabell County Unified Arts Curriculum Design (Guide).
40. Publish Cabell County final report - 1974-1977.
41. End Project - July 1, 1977.

LETTER OF AGREEMENT
Between the
TRAINING PROGRAM FOR TEACHERS IN TECHNOLOGY
West Virginia University
and
MR. LUBY S. WEAVER

As requested by Jerry J. Richter, representing the Training Program for Teachers in Technology (TPTT), and agreed verbally by Mr. Luby S. Weaver on July 11, 1974, the following are the terms of agreement.

Mr. Luby S. Weaver will provide:

1. A formal presentation on July 26, 1974 from 9:00 a.m. to 12:00 noon to workshop staff and participants on the Unified Arts Program in Cecil County, Maryland
2. Time for questions to be asked of him regarding Unified Arts
3. A total of approximately three (3) hours of contact time with staff and participants of the workshop
4. The opportunity for TPTT to video tape Mr. Weaver's presentation.

In return for the services listed above, TPTT will provide:

1. A fee of two hundred and twelve dollars ($212.00) for services rendered by Mr. Weaver.

Luby S. Weaver
Mr. Luby S. Weaver

Jerry Richter
Jerry Richter
Training Associate

D. Lauda
Dr. Donald Lauda, Program Coordinator

GROUP NOTES

Name PROJECT OPEN - WOMEN Date Sept. 7

Group Work Session # #2 Time 11 - 12

Objective of Session: WEEKLY DEBRIEF

Meeting Notes: Sheppard, Tsuchi, Wright, & Fox set up a working schedule with each of these Teachers. All consultants have met personally with their teachers except for Fred (by Telephone). Magnolia is getting of the ground. Fred of course is having personal problems getting out there. Paden City & Hundred have had minor problems due to schedules but this is being taken care of. Other than this everything going great.

Summary:

We decided that two major projects were to begin: ① Formulate theories of Community Change Package

Conclusion: ② Pretest-post test of teachers Because of course work & meeting time with teachers it is impossible for us to

Recommendations: double up and save on travel. We have changed meeting times to Tuesdays at 9:00 A.M.

Appendix D

Typical Unit of Instruction Developed

UNIFIED ARTS SCOPE AND SEQUENCE

EIGHTH GRADE

1 week - Unifying Experience (Introduction)

12 weeks - Independent Units (4 weeks per unit)

- Art: Painting
  - Thumbnail sketching
  - Painting techniques
  - Water, oils, and acrylic
- Home Economics: Clothing production
  - Pattern selection & alternation
  - Machine techniques
  - Production sewing
- Industrial Arts: Production enterprise
  - System elements
  - Resource elements
  - Coordinating elements

4 weeks - Unifying Experience (Careers)

15 weeks - Independent Units (5 weeks per unit)

- Art: Advanced creative endeavors
  - Crafts or
  - Drawing or
  - Painting
  - Printing technique
- Home Economics: Understanding foods
  - Nutrition
  - Kitchen tool and conveniences
  - Measuring & mixing
  - Planning & consumerism
  - Cooking experience
- Industrial Arts: Construction
  - Getting ready to build
  - Classifying structure
  - Servicing property & home maintaini

4 weeks - Unifying Experience (Model Community)

INTRODUCTORY UNIFYING EXPERIENCE
EIGHTH GRADE
One Week

GOAL:

To create an enthusiastic unifying experience which will interest and aid the student in understanding the concepts and purposes of unified arts.

RATIONALE FOR UNIT:

Since the student is beginning his second year in the study of unified arts, it would seem appropriate that he begin the program with a unifying experience which would reinforce the relationships that exist between art, home economics, and industrial arts. By developing a product in the early days of the course, it is hoped that new interests will be cultivated and that the student will continue to experience the unifying features of the three disciplines. In addition, when the product is completed and taken home, it is hoped that it will arouse parent's interest toward their child's education in unified arts.

OBJECTIVES FOR UNIT:

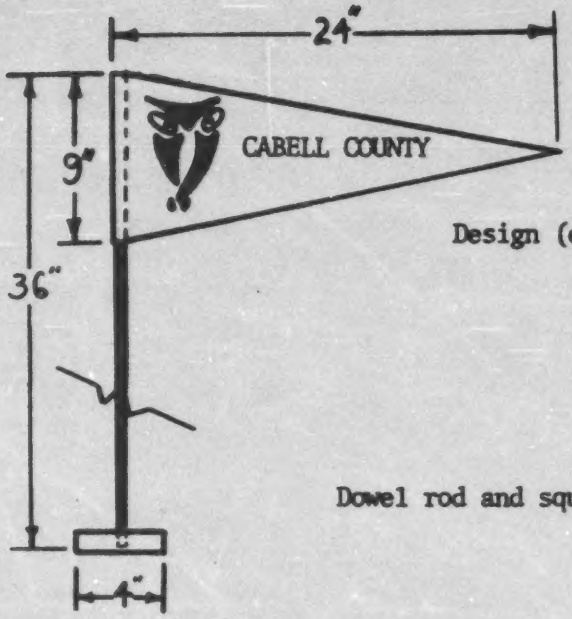
1. To develop an awareness of the planning and cooperation involved in the production of group products.
2. To experience the interrelatedness of the art , home economics, and industrial arts processes.
3. To participate, through a hands-on activity, in the construction of a project.

POSSIBLE ACTIVITIES:

This activity is not intended to be a creative endeavor, but an activity that demonstrates the relationships of the processes used in the three unifying disciplines. It should be pre-planned by the teachers and take place in one

common classroom if possible. Possible activities that could be incorporated to meet the above objectives could include:

SCHOOL PENNANT

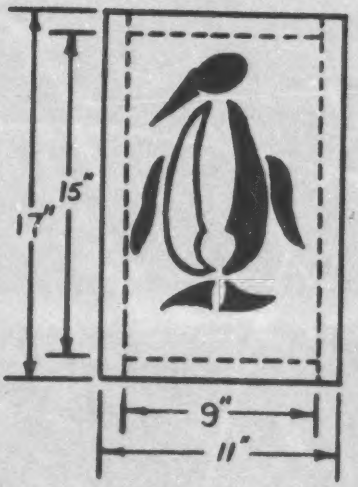


Felt (cut and sewn by home economics.)

Design (designed and silk screened by art.)

Dowel rod and square base (cut and stain by industrial arts.)

DECORATION PICTURE



Frame (cut and fasten by Industrial Arts, 1 inch frame.)

Design (figure to be placed on background shoud be designed by the art class.)

Select, cut and fasten design to background by the home economics class.

Burlap or muslin background.

NOTES:

REFERENCES:

Lindbeck, John R., Duenk, Lester G. and Hansen, Marc F., Basic Crafts, Peoria, Illinois, Chas. A. Bennett Company, Inc., 1969.

Carlsen, Darvey E., Graphic Arts, Peoria, Illinois, Chas. A. Bennett Company, Inc., 1958.

Kagy, Frederick, Graphic Arts, Chicago, The Goodheart-Willcox Company, Inc., 1961.

Broekhuizen, Richard J., Graphic Communications, Bloomington, Illinois, McKnight and McKnight Publishing Company, 1973.

Barclay, Marion and Champion, Frances, Teen Guide to Homemaking, New York, McGraw-Hill Book Company, 1967.

TECHNDLOGICAL MAN-AWARENESS
(From past to present)

COURSE DESIGN

This course is designed for all seventh and eigth grade students one period per day, five periods per week at Paden City High School. Each student will rotate through the four disciplines of:

Man: The Provider (Home Economics)
Man: The Creator (Art)
Man: The Maker (Industrial Arts)
Man: The Expressor (Music)

During the school year each student will spend approximately nine weeks in each area.

RATIONALE

Since the beginning of civilization man has had to control and understand his environment in order to survive. He has developed slowly, and sometimes has stumbled and has fallen backwards in his quest for knowledge and new techniques. He has changed from an individualistic creature to a person who depends on a systematic and complex society. He has done away with the chains of working from dawn to dusk and has developed leisure time. He has become more informed about people, language, customs, in general the world.

But how has this slww but determined advancement of man taken place? What are the reasons for these developments? How do they effect us today? In each of the following disciplines; Man: The Provider, Man: The Creator, Man: The Maker, Man:The Expressor, we can trace this development of early man to his present state. We can observe and interelate his technological growth through each discipline, and we will be able to identify mans constant drive of technical achievements in controlling nature and society.

OBJECTIVES

1. To create a technolgical awareness of man
2. To unify the knowlwdge base of the arts through the study of technolgical man
3. To compare changes in society from an individualistic to a systematic society
4. To identify mans effort to control his environment through technology
5. To identify the socological implications of technology as it relates to family and liffe

West Virginia University MORGANTOWN, WEST VIRGINIA 26506

College of Human Resources and Education
Technology Education Program

May 5, 1975

Technology Education Center
2925 University Avenue
West Virginia University

Dear Dr. McCrory:

Here are the results of the first industrial arts county inservice night, April 16th, at Paden City. We are and you should be extremely pleased with not only the participation of everyone but the amount of pertinent material that was generated.

Our next meeting is scheduled on June 17th, at 7:00 p.m. at Magnolia High School. Mr. Loy Stull and Mr. Keith Ritz have agreed to chair this meeting which will attempt to identify a rationale and some common goals for the production programs being offered in the County.

Similar to our last meeting we would like you to reflect and list your interpretations to the following questions. 1.) Why and what are we teaching in the area of production? 2.) What are the goals and objectives of our present and proposed production courses? 3.) How can we accomplish those goals and objectives?

We have also tentatively scheduled a meeting the following Tuesday, June 24th, at Hundred High. On this night, Mr. Gerald Bissett and Mr. Roy Brasher will chair a meeting on transportation.

See you on the 17th.

Sincerely,
Frank Trocki
John Wright
Frank Trocki
John Wright

CC: Dr. David McCrory
Dr. Donald Lauda
Mr. Gary Witschey
Mr. Gerald Bissett
Mr. Loy Stull
Mr. Roy Brasher
Ms Sara Kelly
Mr. Keith Ritz
Mr. George Marshall
Mr. Robert Jones

COMMUNICATIONS RATIONALE
(WETZEL COUNTY - INDUSTRIAL ARTS)

We believe that Wetzel County is a microcosm of the world at large; that its students' need for communication skills is comparable to that of any community, whether large or small; that a knowledge of the technical aspects of communication systems will lead to an understanding of the roles of the media in a technological society; and that the teacher, as a manager, provide the student with both simulated and authentic experience in the skills and techniques of communication. It is through these experiences that the student will become a discerning member of society.

COMMUNICATIONS GOAL
(Wetzel County - Industrial Arts)

- The student will be able to gain an awareness of the communication process.
- The student will be able to understand the techniques of communications.
- The student will be able to gain an awareness of the effects of communications on man and society.
- The student will be able to gain an understanding of the future role of communications in society.
- The student will be able to understand the history and development of communications.
- The student will be able to gain specific skills in communications media.
- The student will be able to understand mans need and desire to communicate effectively.
- The student will be able to develop individual values so that he will become a discerning memeber of a technological society.
- The student will be able to develop leisure use of communication skills.
- The student will be aware of possible career opportunities in communications.

COMMUNICATIONS COURSES

1975 - 1976

(Wetzel County - Industrial Arts)

1. Creative Design
2. Research and Design
3. Drafting and Design
4. Graphic and Visual Communications
5. Visual Thinking and Illustration
6. Electricity and Electronics
7. Communications Technology
8. Photography
9. Graphic Illustration
10. Technical Illustration
11. Architectural and Structural Design
12. Machine and Sheet Metal Design
13. Math in Technology

Appendix E

Typical Field Visitations

FIELD VISITATION OF MASON COUNTY PROJECT OPEN

October 25, 1974

PRESENT: Dr. DeVore, James Gray, Chuck Nestor

A. Arrived at Point Pleasant at approximately 9:15. Wil Edwards was at the airport to greet us and take us to Point Pleasant Jr. High School.

B. We arrived at the Point Pleasant Jr. High at about 10:00 and reported to the school office to inform the principal that we were on campus. Dr. DeVore had the opportunity to meet Mr. Burris, the principal, at this time. A brief conversation took place.

C. After the meeting we proceeded to Wayne's room where we spent the next two class periods in observation of the program. Throughout these periods we had the opportunity to talk to several students and witness the program in action.
Chuck Nestor: Remained with Wayne while Dr. DeVore, Wil Edwards and Jim Gray went to lunch. This gave me an additional opportunity to work and meet with students. Was pleased with Wayne's program, procedure, and progress. Felt that students were in to what they were doing. Noticed many of the wall charts and was pleased to see that, although tools were lacking, enthusiasm was high and Wayne was receiving quality work.

D. Dr. DeVore, Wil Edwards, and Jim Gray were served lunch at the school cafeteria through the courtesy of Mr. Burris. During lunch Dr. DeVore and Mr. Edwards discussed several topics ranging from county options for expansion to general interests. This discussion was of an informal nature. During the conversation Wil asked Jim if he was to receive a copy of the Wahama Jr. High end of the year report (1973-74). Jim explained that the report had not been included in the Technology Education Year End Report and if he wanted a copy, arrangements would be made for him to receive a "first draft" copy. He said this would be helpful.

E. After lunch a brief meeting was held in Wayne's room concerning the operation and responsibilities of the team members.

F. Wil Edwards then drove us to Wahama School.

G. Upon arrival we checked into the office where Jim Page, vice principal, greeted us. Mr. Sawyer, the principal, was not available at the time. Dr. DeVore arranged to meet him later.

H. We then moved to the "Pit" to observe Walt's classes. Because of a pep rally scheduled that afternoon all classes were cut 10 minutes in length.

I. Walt was conducting a game designed for review of the material covered up to this point. Each class was divided into teams. We observed two classes in operation.

J. After the third period Walt had a brief meeting with Dr. DeVore.

K. Wil then drove us back to Point Pleasant where we met with Wayne once again.

L. Wayne drove us to the airport about 4:10 and we arrived at Morgantown Airport at about 5:30.

West Virginia University | MORGANTOWN, WEST VIRGINIA 26506

College of Human Resources and Education
Technology Education Program

May 9, 1975

TO: Dr. Lauda
Dr. DeVore
John Ritz

FROM: D. McCrory DZM

RE: Observation trip to Cabell County

We are scheduled to travel to Huntington Wednesday, May 14 via Mooney 9596M. The purpose of the trip will be to observe the Cox Landing project and to discuss the project with Mr. Griffis and his staff.

Agenda:

8:30 a.m. Depart Morgantown airport.

10:30 a.m. Pick-up by Cabell County Schools staff at Huntington Airport.

11:00 a.m. Meet with Mr. Griffis and his staff at the Central Office.

12:00 p.m. Lunch

1:00 p.m. Observe at Cox Landing Junior High

3:00 p.m. Depart school

3:30 p.m. Depart Huntington Airport

5:00 p.m. Arrive Morgantown Airport

If it is necessary for McCrory to be at this phone for a call from USOE, or if the weather prevents flying, the trip will be postponed. May 21 is an alternate date.

MEMORANDUM

TO: Dr. DeVore, Dr. Lauda, J. Gray, C. Nestor
FROM: D. McCrory DMC
DATE: November 14, 1974
RE: Project Open Review Meeting (Monday, November 18)

****

Our timetable for Monday will be:

7:00 a.m.	- McCrory to pick up WVU car at Motor Pool.
7:30	- DeVore, McCrory, Gray, Nestor, Lauda (?) to depart from the Teacher Center.
10:00	- Coffee stop at Sedens restaurant.
11:30	- Arrive Pt. Pleasant Vocational Center
12:00	- Lunch in Pt. Pleasant with Edwards and the Superintendent.
1:30	- Tour Wahama Jr. High and observe the CEIT class.
2:30	- Tour Pt. Pleasant Jr. High and observe the CEIT class.
3:30	- Project Review meeting at Pt. Pleasant Jr. High CEIT room.
3:30	- Introductions (Edwards)
3:35	- Progress Report on Wahama Project (Seder and Gray)
4:00	- Progress Report on Pt. Pleasant Project (Andrews and Nestor).
4:30	- Reactions to Progress Reports (Withers and DeVore)
4:45	- Discussion of plans for 1975 and beyond (Edwards and McCrory).
5:15	- Closure and adjournment
5:30	- WVU group depart Pt. Pleasant.
6:30	- Dinner stop at Sedens restaurant
10:30	- Arrive Morgantown
11:00	- McCrory to return WVU car to Motor Pool.

Appendix F

Typical Daily and Weekly Reports

FROM: John M. Ritz
TOPIC: Project Open - Cabell County
SUBJECT: Daily Log
DATE: November 18 - November 22, 1974

On November 17 Les Miller and I departed Morgantown to travel to Huntington. The visitation was arranged to observe Cox Landing's Unified Arts program and to conduct an inservice session on transportation for the unified arts team.

We arrived at the school around 8:00 a.m. and proceeded to the principal's office to inform him of our visitation. Leaving the office, we briefly met with of the Unified Arts teachers to inform them of our arrival. After a brief introduction with Les Miller, we proceeded to wander in and out of the three facilities. Surprising to me, Mr. Ashworth had the students in his classes busy with activities. This was really the first time this year that I saw students involved with constructive hands on activities. In both art and home economics the students were experiencing activities.

After talking to Mary Pragulis, home economics, I was surprised to find out that Theon's students had been working for about a week. She mentioned that she continued to pressure him as I had asked.

During the remainder of the morning we observed the separate disciplines of art, home economics, and industrial arts. I spoke with many students since the majority of them also have unified arts during fourth period. Many of them enjoy unified arts and they are happy that they are finally doing something in the industrial arts area.

At the start of fourth period, unified arts, Les and I were particularly interested in Theon's class. To date Theon was working on his independent unit on production. This is a three week unit and the second time he had worked through it. The emphasis of the unit is placed on tool introduction, materials, and processes. The last time Theon taught the unit, it took him six days to progress through the tool identification section and he omitted the tool experience activities. He completely omitted the materials section and concentrated on the production of a metal dust pan. The production activity was supposed to be a three material, mass produced napkin holder.

During this run of the production unit, he reduced the tool experience section to four days and did include practice experiences with the tools. Again he omitted the two day materials testing activity and proceeded into the processes section. Since he complained of not having any processed lumber the last time through the unit, I suggested that he have the students make individual sugar scoops instead of group dust pans. The students were working on fastening wood handles to the sheet metal sugar scoops during the period.

In the home economics area, students were finishing the sewing of their aprons. The girls were making kitchen aprons and the boys, shop aprons. All was progressing smoothly and the students were quite involved.

In the art section, the students were working independently on macrame, desk sets, and tie dying. Again the students were involved and busy working.

An added point of interest was that for the first time this year, students in the industrial arts section did not complain when I was taking pictures. They were all involved in their work and hardly noticed.

After having lunch with the teachers, Les and I met with Mary and Theon during their planning period. Theon was presented with a rough outline and basic information for his communication unit. After this was taken care of we discussed the arts festival or enterprise unit slated to run two weeks before Christmas. I had a copy of material that explained how to organize an enterprise which I left with the teachers. I also presented a lesson on the organization of an enterprise. Suggested products for the home economics area will be stuffed animals, Christmas ornaments, and crafted key chains. Industrial arts will be concentrating on cutting boards and yo-yo's. The students will be able to select the unified arts area in which they wish to work. The art section will concentrate on individual production and develop craft shops for sales. This breaks up the notion of no creativity in mass production and still meets the purpose of the unit - crafts fair and money for Christmas.

I spoke briefly with Theon and Mary concerning their present independent units. Mary has again refined her plans and Theon plans to include the materials unit the third time through the unit.

Later in the afternoon Les and I visited Miss Floyd at the elementary school. We talked to the students and had them describe their plastics unit projects to us. The final stage of the plastics unit will be the construction of decorative products for Christmas.

After school Les Miller conducted his presentation on transportation and the unified arts curriculum. Included in this unit were sections on "What is technology, what is transportation technology, why is transportation an important area of study, what major concepts can we identify about transportation, identify major transportation concepts found in art, home economics, industrial arts, and natural science, and describe several conceptual learning experiences in which two or more unified arts areas are represented." Some outcomes that developed from the session included the concept of transportation were auto make-up, baking of bread, and making moccasins. Overall, it was felt that the inservice was very beneficial.

On our way back to Morgantown Les and I discussed facility improvement and expansion. We decided that Theon must develop his objectives and activities and then have Les work with him. Les and I plan to work on this topic more in the future.

Thursday I received a note from Dr. McCrory concerning a T.V. taping with Mr. Griffis of Cabell County. The taping was to be on December 2. Due to the short notice, scheduled end of the semester class work, and lack of transportation, I had to contact Mr. Griffis and decline the offer. I asked if it could be rescheduled for December 16, my next trip to Cabell County, but it could not.

I have received the letters and surveys to send to the state supervisors of instruction concerning existing unified arts programs and am waiting for the list of names and addresses from Jim Snyders office.

All slides of Project Open - Cabell County have been categorized and labelled and are ready to be organized into a series. Another roll was taken during my last visit to Cox Landing.

Teacher Center Staff Minutes
February 15, 1974
12:30 pm

Present: McCrory, Richter, Lauda, Hull, Summers, Seder, Thomas, Bucholc, Robinson, Miller, Cupples, DeVore.

ANNOUNCEMENTS:

Lauda: Summer schedule is out (courses only, no times)
Fall schedule is out for pre-registration.

Robinson: Tele-lecture, 1:00 - 2:00 Friday, February 22 at 2925 on History of Air Transportation (Dr. Bob Pelton - N.A.S.A.)

McCrory: Letters are being received from principals and superintendents indicating they will be in attendance to assist with workshops.
Project Open Advisory Committee Meeting is scheduled on a bi-monthly basis. The next scheduled meeting is for Tuesday, February 26, 1974 at 12:00 noon in the Project Open Office of 2925 Univ. Ave.
T.C. Staff is encouraged to attend the WVIAA Conference at Cedar Lakes. Reimbursement is available for on-Conference ground lodging and meals.
Reaction to minutes format - acceptable to those represented.

PROGRESS REPORTS:

Robinson:
1. 1 - 2pm, Fri. Feb. 22, 1974, Dr. Bob Pelton will be presenting via tele-conference a past-present-future review of aviation. The period will be supported by visuals from N.A.S.A. Langley
2. Progress is being made toward a N.A.S.A. tele-conference for Hundred High School in the near future.

Richter:
1. Took part in a 6 hour "dress-rehearsal" Sat. Feb. 9.
2. Working on the refinement of metric & technology presentations for up-coming workshops.
3. Nearing completion of up-coming issue of Techne.
4. The reproduction of Techne will be on Mimeo-machine in 2929.

Bucholc:
1. Designed and pasted agenda for conference
2. Jerry and I put final touches on the conference presentation and collected all equipment.
3. Sent out question sheets to all "presenters" for equipment needs - developed list & layout for media set-up for conference.
4. Jerry and I developed stencil & proofs of techne cover.
5. Am presently working on Techne reproduction

Hull:
1. Conducted two tax sessions with HRE Students
2. I revised Manpower History for ORD Book.
3. Am planning the session on T.L.U./Precision teaching
4. Will be meeting with Bill and Dave in order to document slides
5. Working on Energy Crisis Article.

Seder:
1. Finished transparencies for Road Show
2. Secured 4 rolls of 126 instamatic slide film and 4 packes of flashcubes
3. Debriefed Dave on Wahama.
4. Informed Jim of metric conference. Asked him to extend personal invitations to our Mason Administrators, to attend the administrative Conference at Parkersburg.
5. Spoke to Jim on Tuesday
6. Attended Project Open Advisory Committee Meeting on Feb. 14 for Wetzel County. The Advisory meeting will be held twice a month, one for the Mason Project and the other for the Wetzel Project. Found it to be informative.
7. Sent out notices to Project Open Advisory Committee to inform them about the Feb. 26 meeting.
8. Jim will return next weekend for a meeting on Project Open and to discuss our program (clinical doctorate).

Summers:
1. Am polishing presentation procedures.
2. Am reworking transparency for Maryland Plan presentation.
3. I made a silk screen for Metric Production Activity.

Miller:
1. Modified art work and had transparencies runn off for IACP Presentation
2. Met with Bill Cupples for Additional Conference planning sessions
3. Completing work on Training aid for concept in Transportation presentation.
4. Attended Sat. Practice session
5. Attended lunches with Dr. Adong
6. Am working on T.P.T.T. Film

McCrory:
1. Conducted an exploratory meeting with Dr. Willard Allen on the nature of Aerospace workshops.
2. Attended seminar on Aerospace Education
3. Gave progress to the Wetzel County Board of Education regarding Project Open at Hundred High School
4. Attended Project Open Advisory meeting.
5. Working on Workshops for Parkersburg (2/18) and Romney (2/21)
6. Working on proposal for Wetzel County Project Open.

FIELD SERVICE REPORTS
May 16, 1975

PRESENT: Andrews, Ritz, Miller, Robinson, Bucholc, Cupples, McCrory (presiding)

ANNOUNCEMENTS: A conference on energy is being held this weekend in the Towers dorm.

No debrief meeting, May 23, 1975.

FIELD COORDINATOR'S REPORT (McCrory)

Dan Cleaver and Bill Griswold will join George Maughan, Jerry Richter, and Stan Bucholc to form the TPTT team next year. Bob Sherer will come aboard in the new extension specialist position. The signed P. O. Agreement for 1976 has been received from Mason County. Agreement on contract negotiations with the USOE been reached, so official approval of TPTT funding seems eminent.

PROJECT TEM REPORTS:

Cabell County Project Open (Ritz):

On Monday I completed the drafts of the nine units for the 8th grade portion of the Cabell County Unified Arts Guide. These were typed and reproduced for distribution and review by the Cabell County staff on Wednesday. Dr. DeVore, Dr. Lauda, Dr. McCrory, and I flew to Huntington for an observation, project review, and distribution of the draft of the Unified Arts guide. At this time, I am receiving literature and letters from round two of my Unified Arts survey.

Mason County Project Open (Andrews):

Met with Dave on Monday for monthly planning session. Spoke with Will Edwards about requistions and year end inventory. Spoke with him about equipment security and he siad he would have a padlock put on the storage room. Spoke with Chuck project planning, impact of the project, and end of the year, etc. Chuck just completed a nine unit on photography with the students - it went over very well.

Wetzel County Project Open (Wright):

No report this week. John is in exams and Frank is on leave.

TPTT
Bucholc:

Evaluated Vandegrift's TLU at Morgantown High. Completed TPTT graphics area order and submitted. 3. Completed workshop announcement sheet and logs. 4. Got price estimate and turned in "Progress Report" cover for printing. 5. Drafted TLU dinner invitation letter. 6. Worked on my TPTT yearly report.

Cupples:

Completed final report cover. Completed brochure insert on transportation workshop. Processed, mounted, and delivered slides for C. Vandegrift. Processed and mounted slides for Project Open - Wahama. Inventoried photo work area. Completed list of needed supplies for photo area. Filed remaining technical area slides in file. Completed photowork on insert form.

Miller: 71

Submitted proposal for facilities workshop. Called Jim Snyder and made arrangement for TPTT securing a mailing list for its up-coming workshops. Contacted Mrs. Bright and met with her to secure catalogs and descriptions and prices on facilities equipment for 2925. Made arrangements for reproducint the facilities drawings Dave and I have been working on. Completed work on House drawing. Worked with Jerry J. Robinson on processing data on the Delphi.

Richter:

No report, taking exams.

TERRC (Griscom):

Continued work on education area. Receiving end of the year orders. Verified back-up orders. Reproduced resource cards. Processed graphics order. Completed paper work for R & D trip to Cleveland. Continued on-going activities such as cataloging, classification, filing, etc.

Appendix G

Typical Letters of Commendation

Board of Education
WETZEL COUNTY SCHOOLS
P. O. Box 248
NEW MARTINSVILLE, W. VA. 26155

JACK C. DULANEY
Superintendent

GEORGE A. JOHNSON
Assistant Superintendent

TELEPHONE
304-455-2441

February 14, 1975

Dr. David L. McCrory
College of Human Resources & Education
Technology Education Program
West Virginia University
Morgantown, West Virginia 26506

Dear Dr. McCrory:

On behalf of the Wetzel County Board of Education, I would like to thank you, Jim Snyder, John Wright, and Frank Trocki for organizing and presenting the progress report on Project OPEN at the February 11th Board of Education meeting. The report was very informative and indicative of the quality of work presently being done in the technology education field.

You are aware that the Board of Education directed me to work with you in the development of a fourth contract. I would assume that this contract will also be a consultant model project.

We will need to arrange a conference to discuss the new directions in which Project OPEN seems to be moving in Wetzel County. Please contact me so that we can arrange our schedules. A Monday or Wednesday afternoon could work very nicely for me.

Sincerely yours,

Jack

Jack C. Dulaney
Superintendent of Schools

JCD:mk

State of West Virginia
Department of Education
Charleston
25305

DANIEL B. TAYLOR
STATE SUPERINTENDENT
OF SCHOOLS

TO: Dr. David McCrory

FROM: James F. Snyder, Program Specialist, Industrial Arts

DATE: October 2, 1974

SUBJECT: Hundred High School Visitation

On 18, September 1974, I visited with John Shriver, Roy Brasher and Loy Stull at Hundred High School.

In conversation with Mr. Shriver I was informed that the Industrial Arts, Project Open was off to a good start for 1974. He did not express any concerns about the teachers, the students or the program. He did inform me the communications lab was slow in getting equipped and being finished.

Roy Brasher was conducting a beginning woods technology class and seemed to be doing a good job. The class was composed of both boys and girls and numbered eleven (11) girls and seven (7) boys. This fact was exciting to me. While inspecting the communication lab, I observed new items i.e. mixing valve for darkroom, offset press and exposure cabinet. Two students were busy hanging draperies and removing paint from the windows. My observation is that the lab is going to be a tight fit for equipment and eighteen (18) students. Management is going to have to be close by the teacher to operate that class.

Loy Stull was involved with a drafting class in the small room on the second floor. It was difficult to get to Loy with the wall-to-wall student set-up. It appears that the room is much to small for anything let alone a drafting class.

Both teachers were of high spirit and seemed to be enjoying their classes.

There is a marked improvement over one year ago. The labs, the teachers attitudes and their enthusiasm is exciting to observe. John Wright is doing a good job in this project.

CC: Dr. Donald Lauda
Dr. Paul W. DeVore
John Wright

State of West Virginia
Department of Education
Charleston
25305

DANIEL B. TAYLOR
STATE SUPERINTENDENT
OF SCHOOLS

TO: Dr. David McCrory

FROM: James F. Snyder, Program Specialist, Industrial Arts

DATE: October 2, 1974

SUBJECT: Mason County Project Open Visitation

On 1, October 1974, I visited Point Pleasant Junior High School and Wahama High School to observe and talk with Wayne Andrews and Walt Seder.

I first visited with Wil Edwards and Ed Sommers at the Vocational Technical Center in Mason County. Each man was high on Wayne Andrews and his progress this fall at Point Pleasant Junior High School. Wil commented that he would love to have Wayne and Walt on permanent staff which I felt was a very positive evaluation.

Before going into Wayne's class I stopped and talked with Richard Workman, Assistant Principal, and he was well pleased with Wayne. In fact, his comment was that Wayne's class was the most exciting going at this time of the school year. Richard said his eighth grade son was coming home excited about the class.

Wayne is working on a unit in consumer education. The classes were involved in testing television commercials to establish validity of claims. The students were interested and alert in the experiments. Wayne has good rapport with the students and has been accepted very well at Point Pleasant Junior High. I provided Wayne some materials on consumer education and a game I think will be of some value to him. He expressed some anxieties but I feel they will dissipate in time as he becomes more settled.

Walt is more at ease this fall and appears to be able to cope with most situations internally. He and I had a good discussion after school regarding Career Education. He still has a hang-up but was able to talk about the issue easily.

The Mason County Project Open seems to be progressing very well. The men assigned are doing a good job and are well accepted by the county. My only

concern is the counties commitment and following through with assistance to the men in providing needed supplies and equipment.

CC: Dr. Donald Lauda
Dr. Paul W. DeVore

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
REGION III
3535 MARKET STREET
PHILADELPHIA, PENNSYLVANIA 19101

August 26, 1975

OFFICE OF EDUCATION

MAILING ADDRESS
P.O. BOX 13716
PHILADELPHIA,
PENNSYLVANIA 19101

Dr. David L. McCrory
Coordinator of Field Services
Technology Teacher Center
West Virginia University
2925 University Avenue
Morgantown, West Virginia 26506

Dear Dr. ~~McCrory~~ Dave:

On behalf of Dr. Walker F. Agnew and myself may I express our appreciation for a most informative and enlightening presentation of the Technologies Project's progress to date. We were particularly impressed by the sincere commitment the field trainers possess as they pursue the objectives of your teacher and consultant models.

As the project officer, I feel that this final year has every potential for maximizing the complete institutionalization of our efforts. I might suggest that the SEA be approached early in this action year to provide supportive resources to assure a high level of service to the County School Districts and/or RESA's of West Virginia where staff development in the technologies is needed. One other aspect that could prove important in this year's evaluation is the measurable impact on children's learning in the technologies.

Please express our good wishes to your staff and participants for a most enjoyable day. With kind regards.

Sincerely yours,

James S. Roberts
Assistant Regional Commissioner
Special Services

Phone 525-7871

Cabell County Public Schools

Vocational-Technical Adult Education

Charles G. Moore, Director
Phone 529-2447
529-2448
529-3963

2800-2850 Fifth Avenue Huntington, W. Va. 25702

January 27, 1975

Dr. David L. McCrory
Coordinator of Field Services
Technology Teacher Center
2925 University Avenue
West Virginia University
Morgantown, West Virginia 26506

Dear Dave:

Our thanks to you and the team for conducting a most informative workshop on Unified Arts. I especially want to commend you for the outstanding teamwork which was most obvious to all us in attendance.

When you compile the evaluations, please send a copy to me. Mr. Griffis is most interested in the results.

Since I failed to mention this while you were here, I do want to remind you to submit a request for reimbursement of expenses.

Just an additional note that on Tuesday morning I made a visit to one of the junior high schools and found a number of the faculty discussing the workshop. Their comments were favorable and their enthusiasm was great. Already they had begun to plan some unifying experiences for their school.

Again, our thanks and best wishes for many successful workshops.

Sincerely,

Irene Nenni

Irene Nenni
Vocational Program Specialist

David H. Groves

David H. Groves
Assistant Director
Vocational Technical and Adult Education

Libby Caligan

Libby Caligan
Director of Art

cc: Libby Caligan

CHARLES WITHERS, Superintendent
CHARLES CHAMBERS, Asst. Superintendent

MASON COUNTY SCHOOLS

TELEPHONE 675-4940
EIGHTH STREET
POINT PLEASANT, WEST VIRGINIA

BOARD OF EDUCATION
MR. HARRY L SIDERS President
Gallipolis Ferry, W Va
MR RAY FIELDS
Hartford, W Va
MR ROBERT ADKINS
Point Pleasant, W Va
MR BILL BRADY
Point Pleasant, W Va
MR PAUL WATKINS
Gallipolis Ferry, W Va

79

October 23, 1975

Dr. Dave McCroy
2925 University Avenue
T.P.T.T. Center
West Virginia University
Morgantown, Wva 26306

Dear Dr. McCroy:

I would like to express my appreciation to you and your staff for the excellent metric workshops that were conducted in Mason County this fall. The materials and methods of presentation were excellent.

The workshops were exactly what we were wanting as an introduction of the metric system. About 90% of the teachers attending the workshops rated it as very good or excellent. Over 50% of our teachers expressed the desire to have a follow-up workshop in the spring. If something of this nature can be worked out please let me know.

It was a pleasure working with you and your staff. If I can be of any assistance to you in the future please contact me.

Sincerely,

Phillip D. Goodnite

Phillip D. Goodnite
Mathematics Supervisor

PDG:mc